ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1989 NONPOINT SOURCE WATER QUALITY ASSESSMENT

LONG FORM

*** WATERBODY ***

Name of Waterbody: Clearwater Cr.

Location or Lat/Long: 64° 06' N, 145° 34' W

Waterbody Type:
- [X] River/Stream
- [ ] Lake
- [ ] Fresh Wetland
- [ ] Tidal Wetland
- [ ] Estuary
- [ ] Coastal Shoreline
- [ ] Groundwater

Waterbody Size:
- 23 Miles
- ____ Acres/Hectares
- ____ Acres/Hectares
- ____ Acres/Hectares
- ____ Square Miles
- ____ Square Miles

ADEC USE ONLY
304l: N L M S
WQL: 0 - N
1 - PS
2 - NPS
3 - WQS
4 - Con/Enf
ID#: ____

Segment of Waterbody Addressed:
From: ____
To: ____
Other Description: Trib to Tanana R, near Delta Junction
Size of Segment: ____

USGS Hydrologic Unit #: AK 190 40503-001

*** ASSESSMENT ***

Describe Source of Pollution and Documentation Provided:
Erosion and runoff from agricultural land and upland forests

Type of Documentation (Attached If Possible):
- [X] Water quality data
- [ ] Documented oil spill
- [ ] Enforcement action
- [ ] Photos with documentation
- [ ] Photos without documentation
- [X] Written report
- [X] Field notes
- [ ] Overflight
- [X] Observation
- [ ] Other

Assessment type:
- [X] Monitored
- [ ] Evaluated

Violation of Water Quality Standards:
- [ ] **Past** Violation Documented
- [ ] **Current** Violation Documented
- [X] **Current** Violation Suspected
- [ ] **Future** Violation Projected

Waterbody Status:
- [ ] Impaired - Past
- [ ] Impaired - Current
- [X] Suspected
- [ ] Unimpaired

Comments: Other sources include: Salcha - Big Delta SWCD, ADF&G Annual Surveys, USGS Water Data Reports, USFWS Fish Tissue Analysis.

Author of This Assessment: S. Bradley Affiliation: ADEC/WQM Date: 89/09 YY/MM

*** USE STATUS ***

Meets Clean Water Act Goals:

- [X] Fishable
- [ ] Not Fishable
- [ ] Fishable Not Attainable

- [X] Swimmable
- [ ] Not Swimmable
- [ ] Swimmable Not Attainable

Impaired Uses:

FRESHWATER

- [ ] Drinking
- [ ] Agriculture
- [ ] Aquaculture
- [ ] Industry
- [ ] Recreation, Contact
- [ ] Recreation, Secondary
- [X] Fish, Shellfish, Wildlife

MARINE

- [ ] Aquaculture
- [ ] Seafood Processing
- [ ] Industry
- [ ] Recreation, Contact
- [ ] Recreation, Secondary
- [ ] Fish, Shellfish, Wildlife
- [ ] Harvest of Fish, Shellfish

Support of Designated Uses:

- [ ] One or More Uses Not Supported (Impaired)
- [ ] One or More Uses Partially Supported (Partially Impaired)
- [X] One or More Uses Suspected to Be Affected (Suspected)
- [ ] One or More Uses Projected to Become Affected (Projected)
- [ ] All Uses Fully Supported, sources present (Unimpaired)
- [ ] All Uses Fully Supported, no sources present (Unimpaired)

Trophic Status:

- [ ] Oligatrophic
- [ ] Mesatrophic
- [ ] Eutrophic
- [ ] Hypereutrophic
- [ ] Dystrophic
- [X] Unknown

Trophic Trend

- [ ] Improving
- [ ] Stable
- [ ] Deteriorating

*** TOXICS ***

Monitored for Toxics: [X] Yes [X] No

Type of Toxics Monitoring:

- [X] 1 Organics in water column
- [X] 2 Organics in sediments
- [X] 3 Organics in fish tissue
- [ ] 4 Organics in discharges
- [X] 5 Pesticides in water column
- [X] 6 Pesticides in sediments
- [X] 7 Pesticides in fish tissue
- [ ] 8 Pesticides in discharges
- [X] 9 Metals in water column
- [X] 10 Metals in sediments
- [X] 11 Metals in fish tissue
- [ ] 12 Metals in discharges
- [X] 13 Other inorganics in water column
- [X] 99 Other inorganics in sediments
- [X] 99 Other inorganics in fish tissue
- [ ] 14 Other inorganics in discharges
- [ ] 15 Toxicity testing of water column
- [ ] 16 Toxicity testing of sediments
- [ ] 17 Toxicity testing of discharges

Fish and Shellfish Contamination:

- [X] 0 None detected
- [ ] 1 Contaminated fish
- [ ] 2 Fishing advisory
- [ ] 3 Fishing ban
- [ ] 4 Fish abnormalities
- [ ] 5 Shellfish restrictions due to pathogens
- [ ] 6 Fish kill

*** NONATTAINMENT CAUSES ***

Pollutants: (H = High, M = Medium, S = Slight)

__ 0 Cause Unknown
__ 1 Unknown toxicity
__ 2 Pesticides
__ 3 Priority organics
__ 4 Nonpriority organics
__ 5 Metals
__ 6 Ammonia
__ 7 Chlorine
__ 8 Other inorganics
__ 9 Nutrients
__ 10 pH
H 11 Siltation

Type _____
Type _____
Type _____
Type _____

__ 12 Organic enrichment
__ 13 Salinity/TDS/Chlorides
__ 14 Thermal modifications
__ 15 Flow alteration
__ 16 Habitat alteration
__ 17 Pathogens
__ 18 Radiation
__ 19 Oil and Grease
__ 20 Taste and Odor
__ 21 Suspended solids
__ 22 Noxious aquatic plants
__ 23 Filling and draining

Sources of Pollutants: (H = High, M = Medium, S = Slight)

Point Sources
__ 1 Industrial
__ 2 Municipal
__ 3 Municipal pretreatment
__ 4 Combined sewers
__ 5 Storm sewers
__ 6 Other dischargers

Nonpoint Sources
__ 9 Unspecified

Agriculture
M 11 Non-irrigated crop production
__ 12 Irrrigated crop production
__ 13 Specialty crop production
__ 14 Pasture land
__ 15 Range land
__ 16 Feedlots
__ 17 Aquaculture
__ 18 Animal holding areas
__ 19 Manure lagoons

Silviculture
__ 21 Harvest, restoration
__ 22 Forest management
__ 23 Road construction/maintenance

Construction
__ 31 Highway/road/bridge
__ 32 Land development

Urban Runoff
__ 41 Storm sewers
__ 42 Combined sewers
__ 43 Surface runoff

Source Unknown
__ 90 Source Unknown

Resource extraction/exploration
__ 51 Surface mining
__ 52 Subsurface mining
__ 53 Placer mining
__ 54 Dredge mining
__ 55 Petroleum activities
__ 56 Mill tailings
__ 57 Mine tailings

Land Disposal (Permitted Activities)
__ 61 Sludge
__ 62 Wastewater
__ 63 Landfills
__ 64 Industrial land treatment
__ 65 Onsite wastewater systems
__ 66 Hazardous waste
__ 67 Septage disposal

Hydrologic Modification
__ 71 Channelization
__ 72 Dredging
__ 73 Dam construction
__ 74 Flow regulation/modification
__ 75 Bridge construction
__ 76 Removal of riparian vegetation
__ 77 Streambank modification
__ 78 Draining/filling of wetlands

Other
__ 81 Atmospheric deposition
__ 82 Waste storage/storage tank leaks
__ 83 Highway maintenance and runoff
__ 84 Spills
__ 85 In-place contaminants
H 86 Natural
__ 87 Recreational activities
__ 88 Upstream impoundment
__ 89 Salt storage sites
__ 99 Septic tank seepage

*** COMMENTS ***

DESCRIBE POLLUTANTS AND POLLUTANT SOURCES. THE BASIS FOR THE DETERMINATION THAT A WATERBODY IS IMPAIRED MUST BE EXPLAINED IN THIS SECTION. DESCRIBE THE NATURE OF THE VIOLATION OF WATER QUALITY STANDARDS, INCLUDING DATA OR OTHER DOCUMENTATION IN RELATION TO STANDARDS. ALSO DESCRIBE WHETHER THE VIOLATION IS CONSIDERED PAST OR CURRENT, AND OTHER RELEVANT INFORMATION.

Clearwater Cr. is an important recreational stream in the Delta area. Water has been of pristine quality. Delta Barley Project is adjacent, exposes cleared land. Regular flooding of creeks in area threatens siltation. Established bog around headwaters greenbelt.

Roads & trails threaten erosion. Fire in 1997 threatens major erosion if heavy rain/flooding.

Delta SWCD developed "Clearwater Flood Control & Wind break Plan" in 1964, revised in 1986.

Point Sources:

NPDES Permit Number: _____
NPDES Permit Name: _____
Causes Nonattainment: [ ] Yes [ ] No
Pollutant: _____

NPDES Permit Number: _____
NPDES Permit Name: _____
Causes Nonattainment: [ ] Yes [ ] No
Pollutant: _____

Nonpoint Sources:

Nonpoint Source Name: _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____

Nonpoint Source Name: _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1989 NONPOINT SOURCE WATER QUALITY ASSESSMENT

SHORT DATA FORM

Name of Waterbody: Clearwater Cr.

Location or Lat/Long: 40503. Trib. of Tanana R, near Delta Junction (64° 06' N, 145° 34' W)

Waterbody Type:
- [X] River/Stream
- [ ] Lake
- [ ] Fresh Wetland
- [ ] Tidal Wetland
- [ ] Estuary
- [ ] Coastal Shoreline
- [ ] Groundwater

Waterbody Size:
- ____ Miles
- ____ Acres/Hectares
- ____ Acres/Hectares
- ____ Acres/Hectares
- ____ Square Miles
- ____ Square Miles

Segment of Waterbody Addressed:
- **From:**
- **To:**
- **Other Description:**
- **Size of Segment:**

Describe Source of Pollution and Documentation Provided: Erosion and runoff from agricultural land and upland forests, GO.

Type of Documentation (attached if possible):
- [X] Water quality data
- [ ] Documented oil spill
- [ ] NOV, Enforcement action
- [ ] Photos with documentation
- [ ] Photos without documentation
- [ ] Written report
- [ ] Field notes
- [ ] Overflight
- [X] Observation
- [ ] Other

Comments: Water sampling done on Clearwater Cr. after flooding in late June - very turbid water from runoff. After flooding, Scott Gray of Geological Surveys has data - need to check with him to see if results are in.

Author of This Assessment: Gary Champlin (Delta) SCS, **Affiliation:** (per phone conversation with Susan Bailey) **Date:** 7/20/89

Pollutants: (H = High, M = Medium, S = Slight)

__ 0 Cause Unknown
__ 1 Unknown toxicity
__ 2 Pesticides: Type _____
__ 3 Priority organics: Type _____
__ 4 Nonpriority organics: Type _____
__ 5 Metals: Type _____
__ 6 Ammonia
__ 7 Chlorine
__ 8 Other inorganics
__ 9 Nutrients
__ 10 pH
__ 11 Siltation
__ 12 Organic enrichment
__ 13 Salinity/TDS/Chlorides
__ 14 Thermal modifications
__ 15 Flow alteration
__ 16 Habitat alteration
__ 17 Pathogens
__ 18 Radiation
__ 19 Oil and Grease
__ 20 Taste and Odor
__ 21 Suspended solids
__ 22 Noxious aquatic plants
__ 23 Filling and draining

Sources of Pollutants: (H = High, M = Medium, S = Slight)

Point Sources
__ 1 Industrial
__ 2 Municipal
__ 3 Municipal pretreatment
__ 4 Combined sewers
__ 5 Storm sewers
__ 6 Other dischargers

Nonpoint Sources
__ 9 Unspecified

Agriculture
__ 11 Non-irrigated crop production
__ 12 Irrrigated crop production
__ 13 Specialty crop production
__ 14 Pasture land
__ 15 Range land
__ 16 Feedlots
__ 17 Aquaculture
__ 18 Animal holding areas
__ 19 Manure lagoons

Silviculture
__ 21 Harvest, restoration
__ 22 Forest management
__ 23 Road construction/maintenance

Construction
__ 31 Highway/road/bridge
__ 32 Land development

Urban Runoff
__ 41 Storm sewers
__ 42 Combined sewers
__ 43 Surface runoff

Source Unknown
__ 90 Source Unknown

Resource extraction/exploration
__ 51 Surface mining
__ 52 Subsurface mining
__ 53 Placer mining
__ 54 Dredge mining
__ 55 Petroleum activities
__ 56 Mill tailings
__ 57 Mine tailings

Land Disposal (Permitted Activities)
__ 61 Sludge
__ 62 Wastewater
__ 63 Landfills
__ 64 Industrial land treatment
__ 65 Onsite wastewater systems
__ 66 Hazardous waste
__ 67 Septage disposal

Hydrologic Modification
__ 71 Channelization
__ 72 Dredging
__ 73 Dam construction
__ 74 Flow regulation/modification
__ 75 Bridge construction
__ 76 Removal of riparian vegetation
__ 77 Streambank modification
__ 78 Draining/filling of wetlands

Other
__ 81 Atmospheric deposition
__ 82 Waste storage/storage tank leaks
__ 83 Highway maintenance and runoff
__ 84 Spills
__ 85 In-place contaminants
__ 86 Natural
__ 87 Recreational activities
__ 88 Upstream impoundment
__ 89 Salt storage sites
__ 99 Septic tank seepage

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1988 STATEWIDE WATER QUALITY ASSESSMENT

*** WATERBODY *** Delta R

Name of Waterbody: ~~Delta~~ Clearwater Cr

ID#: _____

Type/Size: [X] River/Stream _____ Miles
[] Lake _____ Acres/Hectares
[] Fresh Wetland _____ Acres/Hectares
[] Tidal Wetland _____ Acres/Hectares
[] Estuary _____ Square Miles
[] Coastal Shoreline _____ Miles
[] Groundwater

3041: N (I) M S
WQL: 0 - N
1 - PS
2 - (NPS)
3 - WQS
4 - Con/Enf
Stat: I (T) U
[ADEC Use Only]

USGS Hydrological Unit #: 190- 40503 UR AG RE Natural

Location or Lat/Long: Delta Junction

Is the waterbody in a national or state park, monument, refuge, preserve, or similar area?: [] Yes , [] No , Name Clearwater State Park

*** ASSESSMENT ***

Assessment Date: Yr 88 , Mo 6 / By Steerdevant
Sampling: Begin Yr ___ , Mo ___ / End Yr ___ , Mo ___ / By _____
Reference for Data: Granite Mtn - Clearwater Cr WQ Planning Project

Basis for Assessment:
[] 1 Qualitative, land use/sources
[] 1 Qualitative, complaints/2nd hand
[] 2 Predictive models, unverified
[] 3 Calibrated models
[] 4 Fixed station data, Bio or Chem
[] 5 Effluent toxicity testing
[] 6 Limited site visit
[X] 7 Intensive field assessment

Assessment Category:
[X] Monitored (Data)
[] Evaluated (Judgement)

Next Planned Assessment: Yr 88 , Mo ___ / By _____

Comments: Report prepared by Salcha - Big Delta Soil and Water Conservation District

Size-A	Size-M	Support	Partial	Not-Sup	Cause-%	Size-10	Size-No	Why?
10	10							

*** USE STATUS ***

Meets Clean Water Act Goals:

- [X] Fishable
- [] Not Fishable
- [] Fishable Not Attainable
- [X] Swimmable
- [] Not Swimmable
- [] Swimmable Not Attainable

Impaired or Threatened Uses:

IMP	THR	FRESHWATER	IMP	THR	MARINE
[]	[]	Drinking	[]	[]	Aquaculture
[]	[]	Agriculture	[]	[]	Seafood Processing
[]	[]	Aquaculture	[]	[]	Industry
[]	[]	Industry	[]	[]	Recreation, Contact
[]	[]	Recreation, Contact	[]	[]	Recreation, Secondary
[]	[]	Recreation, Secondary	[]	[]	Fish, Shellfish, Wildlife
[]	[]	Fish, Shellfish, Wildlife	[]	[]	Harvest of Fish, Shellfish

NA

Support of Designated Uses:

- [] All Uses Fully Supported, no sources present
- [] All Uses Fully Supported, sources present
- [X] One or More Uses Threatened
- [] One or More Uses Partially Supported
- [] One or More Uses Not Supported

Trophic Status:

- [] Oligatrophic
- [] Mesatrophic
- [] Eutrophic
- [] Hypereutrophic
- [] Dystrophic
- [] Unknown

Trophic Trend:

- [] Improving
- [] Stable
- [] Deteriorating

*** TOXICS ***

Monitored for Toxics: [] Yes , [X] No

Type of Toxics Monitoring:

- [] 1 Organics in water column
- [] 2 Organics in sediments
- [] 3 Organics in fish tissue
- [] 4 Organics in discharges
- [] 5 Pesticides in water column
- [] 6 Pesticides in sediments
- [] 7 Pesticides in fish tissue
- [] 8 Pesticides in discharges
- [] 9 Metals in water column
- [] 10 Metals in sediments
- [] 11 Metals in fish tissue
- [] 12 Metals in discharges
- [] 13 Other inorganics in water column
- [] 99 Other inorganics in sediments
- [] 99 Other inorganics in fish tissue
- [] 14 Other inorganics in discharges
- [] 15 Toxicity testing of water column
- [] 16 Toxicity testing of sediments
- [] 17 Toxicity testing of discharges

Pollutants: (H = High, M = Medium, S = Slight)

__ 1 Unknown toxicity
__ 2 Pesticides Type _____
__ 3 Priority organics Type _____
__ 4 Nonpriority organics Type _____
__ 5 Metals Type _____

__ 6 Ammonia
__ 7 Chlorine
__ 8 Other inorganics
__ 9 Nutrients
__ 10 pH
H 11 Siltation
__ 12 Organic enrichment
__ 13 Salinity/TDS/Chlorine
__ 14 Thermal modifications
__ 15 Flow alteration
__ 16 Habitat alteration
__ 17 Pathogens
__ 18 Radiation
__ 19 Oil and Grease
__ 20 Taste and Odor
__ 21 Suspended solids
__ 22 Noxious aquatic plants
__ 23 Filling and draining

Sources of Pollutants: (H = High, M = Medium, S = Slight)

Point Sources
__ 1 Industrial
__ 2 Municipal
__ 3 Municipal pretreatment
__ 4 Combined sewers
__ 5 Storm sewers

Nonpoint Sources
__ 9 Unspecified

Agriculture
M 11 Non-irrigated crop production
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__ 31 Highway/road/bridge
__ 32 Land development

Urban Runoff
__ 41 Storm sewers
__ 42 Combined sewers
__ 43 Surface runoff

Source Unknown
__ 90 Source Unknown

Resource extraction/exploration
__ 51 Surface mining
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__ 55 Petroleum activities
__ 56 Mill tailings
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Land Disposal (Permitted Activities)
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Other
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__ 85 In-place contaminants
H 86 Natural
__ 87 Recreational activities
__ 88 Upstream impoundment
__ 89 Septic tank seepage

*** FISH AND SHELLFISH CONTAMINATION ***

Fish and Shellfish Contamination:

- [] 0 None detected
- [] 1 Contaminated fish
- [] 2 Fishing advisory
- [] 3 Fishing ban
- [] 4 Fish abnormalities
- [] 5 Shellfish restrictions due to pathogens
- [] 6 Fish kill

*** POINT AND NONPOINT SOURCES ***

Point Sources:

1 NPDES Permit Number: _____
NPDES Permit Name: _____
Causes Nonattainment: [] Yes , [] No , Pollutant _____

2 NPDES Permit Number: _____
NPDES Permit Name: _____
Causes Nonattainment: [] Yes , [] No , Pollutant _____

3 NPDES Permit Number: _____
NPDES Permit Name: _____
Causes Nonattainment: [] Yes , [] No , Pollutant _____

Nonpoint Sources:

1 Nonpoint Source Name: _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____
_____

2 Nonpoint Source Name: _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____
_____

3 Nonpoint Source Name: _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____
_____

[Including extent of impairment of uses; significance of impacts on public health and the environment; water quality trend; efforts to control pollutants; current priority for developing pollutant controls; and adequacy of data]

Clearwater Cr is an important recreational stream in the Delta area. Water has been is of pristine quality
Area was homesteaded in 1950's
SBD SWCD developed "Clearwater Flood Control & Windbreak Plan" in 1964, rev. 1986; Soil survey 1973

Delta Barley Project is adjacent, exposes cleared land
Regular flooding of creeks in area threatens siltation
Established bog around headwaters as greenbelt

Roads & trails threaten erosion
Fire in 1987 threatens major erosion if heavy rain/flooding

4 Alternative controls evaluated in Report
"Full Treatment" is recommended
Cost ≈ $ 3,514,600, Benefit = $ 2,150,214

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1988 STATEWIDE WATER QUALITY ASSESSMENT

*** WATERBODY *** Delta Clearwater R.

Name of Waterbody: Clearwater Creek

ID#: AK MU 40503 001
3041: N L M S
WQL: 0 - N
1 - PS
(2) - NPS
3 - WQS
4 - Con/Enf
Stat: I (T) U
[ADEC Use Only]

Type/Size:
- [X] River/Stream — 23 Miles
- [ ] Lake — ____ Acres/Hectares
- [ ] Fresh Wetland — ____ Acres/Hectares
- [ ] Tidal Wetland — ____ Acres/Hectares
- [ ] Estuary — ____ Square Miles
- [ ] Coastal Shoreline — ____ Miles
- [ ] Groundwater

AG, erosion

USGS Hydrological Unit #: 190- 40503

Location or Lat/Long: Tributary of Tanana River, near Delta Junction, AK. (64°06'N, 145°34'W)

Is the waterbody in a national or state park, monument, refuge, preserve, or similar area?: [ ] Yes , [X] No , Name ____

*** ASSESSMENT ***

Assessment Date: Yr 1987, Mo 10 / By Salcha-Big Delta Soil & Water Conservation Board
Sampling: Begin Yr 1983, Mo 5 / End Yr 1986, Mo 10 / By T. Beelman
Reference for Data: Granite Mountain-Clearwater Creek Water Quality Planning Project, Final Report 1987

Basis for Assessment:
- [X] 1 Qualitative, land use/sources
- [X] 1 Qualitative, complaints/2nd hand
- [ ] 2 Predictive models, unverified
- [ ] 3 Calibrated models
- [X] 4 Fixed station data, Bio or Chem
- [ ] 5 Effluent toxicity testing
- [X] 6 Limited site visit
- [X] 7 Intensive field assessment

Assessment Category:
- [X] Monitored (Data)
- [X] Evaluated (Judgement)

Next Planned Assessment: Yr ___ , Mo ___ / By ____

Comments: Other sources include:
ADF&G Annual Surveys
USGS Water Data Reports
USFWS Fish Tissue Analyses

Size-A	Size-M	Support	Partial	Not-Sup	Cause-%	Size-10	Size-No	Why?
10	10	23						

Meets Clean Water Act Goals:

- [X] Fishable
- [] Not Fishable
- [] Fishable Not Attainable
- [X] Swimmable
- [] Not Swimmable
- [] Swimmable Not Attainable

Impaired or Threatened Uses:

IMP	THR	FRESHWATER	IMP	THR	MARINE
[]	[]	Drinking	[]	[]	Aquaculture
[]	[]	Agriculture	[]	[]	Seafood Processing
[]	[]	Aquaculture	[]	[]	Industry
[]	[]	Industry	[]	[]	Recreation, Contact
[]	[]	Recreation, Contact	[]	[]	Recreation, Secondary
[]	[]	Recreation, Secondary	[]	[]	Fish, Shellfish, Wildlife
[]	[X]	Fish, Shellfish, Wildlife	[]	[]	Harvest of Fish, Shellfish

Support of Designated Uses:

- [] All Uses Fully Supported, no sources present
- [X] All Uses Fully Supported, sources present
- [] One or More Uses Threatened
- [] One or More Uses Partially Supported
- [] One or More Uses Not Supported

Trophic Status:

- [] Oligatrophic
- [] Mesatrophic
- [] Eutrophic
- [] Hypereutrophic
- [] Dystrophic
- [] Unknown

Trophic Trend:

- [] Improving
- [] Stable
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*** TOXICS ***

Monitored for Toxics: [X] Yes , [] No

Type of Toxics Monitoring:

- [X] 1 Organics in water column
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- [X] 7 Pesticides in fish tissue
- [] 8 Pesticides in discharges
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- [] 15 Toxicity testing of water column
- [] 16 Toxicity testing of sediments
- [] 17 Toxicity testing of discharges

Pollutants: (H = High, M = Medium, S = Slight)

__ 1 Unknown toxicity
S 2 Pesticides Type Fish tissue contamination (DDT, DDD, metals)
__ 3 Priority organics Type _____
__ 4 Nonpriority organics Type _____
__ 5 Metals Type _____
__ 6 Ammonia
__ 7 Chlorine
__ 8 Other inorganics
__ 9 Nutrients
__ 10 pH
__ 11 Siltation
__ 12 Organic enrichment
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Sources of Pollutants: (H = High, M = Medium, S = Slight)

Point Sources
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Nonpoint Sources
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S 86 Natural
S 87 Recreational activities
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__ 89 Septic tank seepage

Fish and Shellfish Contamination:

- [] 0 None detected
- [X] 1 Contaminated fish TRACE
- [] 2 Fishing advisory
- [] 3 Fishing ban
- [] 4 Fish abnormalities
- [] 5 Shellfish restrictions due to pathogens
- [] 6 Fish kill

*** POINT AND NONPOINT SOURCES ***

Point Sources:

1 **NPDES Permit Number:** NA
NPDES Permit Name: _____
Causes Nonattainment: [X] Yes , [] No , Pollutant Fecal Coloform - below corral

2 **NPDES Permit Number:** _____
NPDES Permit Name: _____
Causes Nonattainment: [] Yes , [] No , Pollutant _____

3 **NPDES Permit Number:** _____
NPDES Permit Name: _____
Causes Nonattainment: [] Yes , [] No , Pollutant _____

Nonpoint Sources: metsker report

1 **Nonpoint Source Name:** Pesticides: trace levels DDD + DDT in fish tissue
Nonpoint Source Type: probably from surface runoff of military spraying to
Nonpoint Source Description: control mosquitoes

2 **Nonpoint Source Name:** Potential sediment, fertilizer and pesticide
Nonpoint Source Type: residues from ag project and
Nonpoint Source Description: burned area below Granite Mts at storm events

3 **Nonpoint Source Name:** _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____

[Including extent of impairment of uses; significance of impacts on public health and the environment; water quality trend; efforts to control pollutants; current priority for developing pollutant controls; and adequacy of data]

Clearwater Creek is presently very good water quality with an important grayling and whitefish & recreational fishery.

Storm events have caused runoff gullying below the Granite Mountains in a burned area and through the Delta Agricultural Project.

A 205j report completed in 1987 described ways to mitigate the potential for surface water runoff containing sediment, fertilizer and pesticide residue. The Salcha-Big Delta Soil and Water Conservation District Board is currently collecting data on the effects of the 1986 fire. This information will become a Supplementary Report to the Granite Mountains - Clearwater Creek Water Quality Planning Report.

Salcha-Big Delta Soil and Water Conservation District
P.O. Box 547 - Delta Junction, Alaska 99737 - (907) 895-4241

May 12, 1988

David Sturdevant
Department of Enviromental Conservation
Pouch 0
Juneau, Alaska 99817

re: Water Quality Act, Section 319-Request for nomination of Threatened Water Bodies

Dear Mr. Sturdevant:

This District nominates the Clearwater Creek (also known as the Clearwater River and the Delta Clearwater) as a threatened water body. This stream feeds into the Tanana River from the east-southeast just northeast of Delta Junction.

This stream consistss of clear, continuously running water, fed by underground springs along both banks for its entire length of approximately 20 miles. It is a major recreational stream for boating, rafting, canoeing and fishing, supports a significant population of white fish and grayling during the summer months, and is perhaps the major silver salmon spawning stream in the Tannana drainage.

Siltation and water quality degredation are a threat due to run off from the north slopes of the Granite Mountain section of the Alaska Range, and portions of the Delta Wildlands, Delta Bison Range, Fort Greely Military Reservation, and the Delta Agricultural Project. One study has been completed and a supplementary study is curently underway to assess the situation, recommend appropriate action, and implement those recommendations.

This stream belongs on any list of threatened water bodies.

Sincerely,

C. G. Forck

Charles G. Forck
Secretary-Treasurer

CF/ch

Salcha-Big Delta Soil and Water Conservation District
P.O. Box 547 - Delta Junction, Alaska 99737 - (907) 895-4241

May 12, 1988

Jack Kerin
Division of Land & Water Management
4420 Airport Way
Fairbanks, Alaska 99707-3896

re: U.S. Army Land Use Application - Delta Bison Range

Dear Mr. Kerin:

This District is opposed to U.S. Army use of any portion of the Delta Bison Range for training activities or access routes.

Past experience demonstrates that during afore mentioned activities the U.S. Army has made continuious good faith effort to minimize detrimental impacts on the area. However, the very nature of the activity and the inevitable lapses from total control over personnel performance result in negative impacts.

These negative impacts are particularly crucial in the area applied for. Portions of the stretch of ground which includes the north slopes of the Granite Mountain section of the Alaska Range, the Delta Wildlands, Fort Greely Military Reservations, the Delta Bison Range, and the Delta Ag Project, are subject to severe erosion due to summer rainfall runoff. Existing trails and destruction of vegetation have combined with natural forces to cause major erosion on the surface and to threaten the integrity of the Clearwater Creek, toward which all of this area drains. Siltation and water quality degredation will have tremendous negative impact on the recreational boating, sport fishing (white fish and grayling), and silver salmon spawning.

This District has completed one study of this area, and due to extensive wild fire in late May 1987 is presently conducting a supplementary study to assess the situation and to recommend specific preventative measures to preclude a widening problem.

Continued use by the U.S. Army will create additional hazards as access trails and destruction of vegetation provide additional sites and routes the cutting action of running water.

In its present condition the area in question is subject to the destructive effects of natural forces. To knowingly exacerbate the conditions by permitting additional destructive effects is not wise use of this resource and it will create additional demand for preventive action in the years to come. The requested use permit is not in the best interest of the land, or of the people who will have to deal with the after effects.

Sincerely,

CF

Charles G. Forck
Secretary-Treasurer

cc: Burton Clifford
David Sturdevant
Steve Dubois

CF/ch

Dave,
FYI
Bill

DELTA SURVEYS ASSOC.

P.O. BOX 197 • DELTA JUNCTION • ALASKA 99737
SUITE 103 • DELTA PROFESSIONAL BUILDING

PHONE
(907) 895-4280

ARTHUR J. SAARLOOS
Registered Land Surveyor No. 2238-S

20 OCT 1988

MR. DENNIS D. KELSO, COMM.
DEPT. ENV. CONS., AK.
P.O. BOX O, JUNEAU, AK. 99811

RE: GROUNDWATER WORKSHOPS

DEAR SIR:

THANK YOU FOR INVITING ME TO THE WORKSHOP. I CAN'T MAKE IT BUT WOULD HAVE LIKED TO STATE THE FOLLOWING: THE CLEARWATER RIVER HAS BECOME A RECEIVER OF CHEMICALS USED ON THE DELTA BARLEY PROJECT. ALTHOUGH NOT A GROUND WATER SOURCE PER SÉ, THE CLEARWATER RIVER IS THE RESULTS OF MANY UNDERGROUND SPRINGS. AS FAR AS I KNOW, NOT ONE GOVERNMENT AGENCY IS MONITERING THE RIVER — AS FAR AS CONTAMINATION BY PESTICIDES AND HERBICIDES IS CONCERNED. IN THE OVERALL VIEW OF ALASICAN WATER QUALITY, I HOPE THAT THE CLEARWATER IS INCLUDED.

Thank you,
Arthur J. Saarloos